NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

CONSERVATION COVER

(Acre) CODE 327

DEFINITION

Establishing and maintaining permanent vegetative cover to protect soil and water resources.

PURPOSES

- Reduce soil erosion and sedimentation.
- Improve water quality.
- Enhance wildlife habitat.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on land to be retired from agricultural production requiring permanent protective cover, and on other lands needing permanent protective cover. This practice does not apply to plantings for forage production or to critical area plantings.

CRITERIA

General Criteria Applicable to All Purposes

Species shall be adapted to soil, range site, and climate conditions.

Species planted shall be suitable for the planned purpose and site conditions. Use of invasive species shall be avoided.

Seeding rates and methods shall be adequate to accomplish the planned purpose.

Planting dates, planting methods and care in handling and planting of the seed or planting stock shall ensure that planted materials have an acceptable rate of survival.

Only viable, high quality and adapted seed or planting stock shall be used.

Legume seed shall be inoculated with the proper Rhizobia bacteria species before planting. See Agronomy Technical Note #3 for species-specific information.

Site preparation shall be sufficient for establishment and growth of selected species.

Timing and use of equipment shall be appropriate for the site and soil conditions.

Vegetative manipulation will be accomplished by mechanical, biological or chemical methods, by prescribed burning, or a combination of the four. If burning is used alone or in combination with the other methods, Prescribed Burning must be included as a planned practice.

All nutrients shall be applied following the nutrient management requirements m the Field Office Technical Guide (FOTG).

A seedbed will be prepared that is free, or very nearly free, of all competing vegetation and is not subject to erosion. A firm seedbed will be provided in all cases. A

seedbed is firm enough when the bootheel imprint of an average person leaves a minimum impression in the soil of one-half inch.

Existing perennial vegetation will be destroyed prior to seeding. This may be accomplished by chemical or mechanical means.

Seeding equipment will be a drill capable of placing the seed at the proper depth, provide a uniform flow of seed at the proper rate, and have a packer wheel to press the soil firmly over the seed. In lieu of packer wheels, a cultipacker may be used after seeding.

Seeding depth for loam, silty clay loam and silty clay soils is one-quarter to one-half inch. Seeding depth for sands, loamy sands and sandy-loams is one-half to one inch.

No nurse crops (oats or other small grains) will be seeded with the grass seed. If a carrier is needed to help feed seed through the drill, cracked com, rolled oats or rice hulls will be used.

Adapted improved varieties of grasses, forbs, and shrubs have been developed and should be used when available. Certified seed should be used when available. If certified seed is not available, named varieties will be used. In rare instances when named varieties are not available. utilize seed from as near the area to be seeded as possible. Seed with a variety not stated (VNS) should be from a source 500 miles north and 300 miles south of the area to be seeded. Similar elevation and precipitation determine the east-west range. At a maximum, the seed will originate from an adjoining state (Colorado, Idaho, Montana, Nebraska, North Dakota, South Dakota, or Utah).

Seed will meet all state seed laws. All seed shall have a germination/purity test completed by a certified tester no more than twelve (12) months prior to planting.

All seeding mixtures will be computed based on Pure Live Seed (PLS). PLS is calculated by multiplying the Germination (including hard seed) by the Purity.

See Plant Materials Technical Note #3 for adapted species, seeding rates, recommended varieties/cultivars and seeding dates.

The previous two years of herbicide application will be documented for the area to be seeded. Any potential carryover problems will be addressed by delaying seeding, seeding a cover crop, or altering the seeding mix species composition.

Cover crop establishment may be required under certain conditions. See Table 1 or the Cover Crop standard, for recommendations on cover crop establishment. The temporary cover will be prevented from producing seed by planting late in the growing season, killing the crop with herbicides, or clipping in the late boot stage.

Table 1 - Temporary Cover Recommendations

Cover Crop	Minimum Seeding Rate	Seeding Dates
Oats/Barley	3/4 bu./ac	4/1 – 6/1
Grain	8 lbs./ac	6/15 – 7/15
Sorghum		
Millet	10 lbs./ac	6/15 – 7/15

1 bu. wheat or soybeans = 60 lbs

1 bu. corn or sorghum = 56 lbs

1 bu. barley = 48 lbs

1 bu. oats = 32 lbs

Seedbed preparation and planting shall be done in such a manner as to minimize tillage operations. When seeding into residue of certain harvested crops (e.g. sugar beets, soybeans, beans, etc.). additional seedbed preparation may not be needed.

When planting on a clean seedbed, exposure to erosion can be minimized by completing tillage and planting in a single operation, or by performing primary tillage no more than three days before planting.

Areas around waterways or within 100 feet of a perennial stream or permanent waterbody should receive special consideration and attention during planning and practice implementation to insure rapid and adequate stand establishment.

Competitive weeds will be controlled by either herbicides or mechanical methods. Other pests that could threaten stand establishment will be controlled by the appropriate method. These practices should not disturb wildlife cover during critical periods, which is generally from spring green-up to July 15.

Fertilization is not recommended.

Additional Criteria for Enhancing Wildlife Habitat

Planting/Establishment

Grasses, forbs, and legumes shall be planted in mixes to encourage maximum plant diversity.

Management/Maintenance

Methods used shall be designed to protect the soil resource from erosion.

Maintenance practices and activities shall not disturb cover during the reproductive period for grassland wildlife species.

Maintenance measures must be adequate to control noxious weeds and other invasive species.

To benefit insect food sources for grassland nesting birds, spraying or other control of noxious weeds shall be done on a "spot" basis to protect forbs and legumes that benefit native pollinators and other wildlife.

CONSIDERATIONS

This practice may be used to promote the conservation of wildlife species in general, including threatened and endangered species.

Where applicable, this practice may be used to conserve and stabilize archeological and historic sites.

Consider rotating management and maintenance activities (e.g. mow only one-fourth or one-third of the area each year) throughout the managed area to maximize spatial and temporal diversity.

Where wildlife management is an objective, the food and cover value of the planting can be enhanced by using a habitat evaluation procedure to aid in selecting plant species and providing or managing for other habitat requirements necessary to achieve the objective.

Use native species when available. Consider trying to re-establish the native plant community for the site.

If a native cover (other than what was planted) establishes, and this cover meets the intended purpose and the landowner's objectives, the cover should be considered adequate.

PLANS AND SPECIFICATIONS

Specifications for this practice shall be prepared for each site. They shall include, but are not limited to, recommended species, seeding rates and dates, establishment procedures, and other management actions needed to insure an adequate stand. Specifications shall be recorded using approved specifications sheets, job sheets, narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

Maintenance practices and activities should not disturb cover during the primary nesting period for grassland species in each state. In Wyoming, no maintenance will be performed from spring green-up to July 15. Exceptions should be considered for periodic burning or mowing when necessary to maintain the health of the plant community. Mowing may be needed during the establishment period to reduce competition from annual weeds. Noxious weeds will be controlled to prevent proliferation and spreading to adjacent fields.

Annual mowing of the conservation cover stand for general weed control is not recommended.

Any use of fertilizers, pesticides and other chemicals shall not compromise the intended purpose.